## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (Original) A method for identifying display
molecule(s) having affinity towards molecular target(s),
comprising the steps of

mixing one or more molecular target(s) associated with target oligonucleotide(s) and a library of bifunctional complexes, each bifunctional complex of the library comprising a display molecule attached to an identifier oligonucleotide, which codes for said display molecule,

coupling to the target oligonucleotide(s) the identifier oligonucleotide of complexes comprising display molecules binding to the target, and

deducing the identity of the binding display molecule(s) and/or the molecular target(s) from the coupled product between the identifier oligonucleotide(s) and the target oligonucleotide(s).

2. (Original) The method of claim 1, wherein the display molecule is a reaction product of two or more chemical

entities and the identifier oligonucleotide comprises codons identifying the chemical entities.

- 3. (Original) The method of claim 1, wherein one or more members of the library are potentially binding compounds tagged with identifier oligonucleotides.
- 4. (Currently Amended) The method according to claim 1, 2 or, 3, wherein the chemical entities are precursors for a structural unit appearing in the display molecule.
- 5. (Currently Amended) The method according to any of the claims 1 to 4 claim 1, wherein some or all of the chemical entities are not naturally occurring  $\alpha$ -amino acids or precursors thereof.
- 6. (Currently Amended) The method according to claim 1 or 2, wherein each codon comprises 4 or more nucleotides.
- 7. (Currently Amended) The method according to claim 1-or 2, wherein the display molecules of the library complexes are non- $\alpha$ -polypetides.

- 8. (Currently Amended) The method according to claim 1—to 4, wherein the display molecules of the library complexes are non-nucleic acids.
- 9. (Currently Amended) The method according to any of the preceding claims claim 1, wherein the display molecule has a molecular weight less than 2000 Dalton, preferably less than 1000 Dalton, and more preferred less than 500 Dalton.
- of the preceding claim 1, wherein the identifier oligonucleotide uniquely identifies the display molecule.
- of the claims 1 to 10 claim 1, wherein one or more chemical entities are transferred to the nascent display molecule by a chemical building block further comprising an anti-codon.
- 12. (Original) The method according to claim 11, wherein the information of the anti-codon is transferred in conjunction with the chemical entity to the nascent complex.

- 13. (Currently Amended) The method according to any of the preceding claims, wherein the chemical entities are reacted without enzymatic interaction.
- of the claims 1 to 13 claim 1, wherein the codons are separated by a framing sequence.
- of the claims 1 to 14 claim 1, wherein the display molecule and the identifier oligonucleotide are joined by a selectively cleavable linker.
- 16. (Original) The method according to claim 15, wherein the linker is cleaved by irradiation.
- 17. (Currently Amended) The method according to—any of the claims claim 1, wherein the library comprises one, two or more different complexes.
- 18. (Currently Amended) The method according to any of the claims 1 to 16 claim 1, wherein the library comprises 1,000 or more different complexes.

19. (Original) The method according to claim 1, wherein the molecular target is of a biological origin.

20. (Currently Amended) The method according to—any of the claims 1 to 19 claim 1, wherein the molecular target is immobilized on a solid support.

Claims 21-68 (Cancelled).